INDEX

ASTROPHYSICS

Volume 11, Numbers 1-4, 1975

ASTROPHYSICS
Volume 11, Numbers 1-4, 1975
(A translation of Astrofizika)

A

Abramov, L. A. - 196
Abramyan, M. G. - 77, 212, 324
Adzhyan, G. S. - 231, 345
Akhverdyan, L. G. - 369
Al'ber, Ya. I. - 189
Alodzhants, G. P. - 69, 448
Al'perovich, L. S. - 196
Ambartsumyan, V. A. - 125
Antonov, V. A. - 223
Arakelyan, M. A. - 8, 254
Arp, H. C. - 125
Artyukh, V. S. - 408
Avakyan, R. M. - 69, 448, 454
Avertisyan, A. K. - 69

B

Babadzhanyants, M. K. - 259
Baier, F. W. - 146
Bolgova, G. T. - 181
Börngen, F. - 1, 242, 249, 414
Bruk, Yu. M. - 62

C

Chavushyan, O. S. - 379
Cherepashchuk, A. M. - 30, 399
Chernin, A. D. - 223
Chubaryan, É. V. - 69, 448
Chugunov, Yu. V. - 203

D

Dibai, É. A. - 8, 254
Doroshenko, V. T. - 422

E

Éidman, V. Ya. - 189
Éigenson, A. M. - 247
Engibaryan, N. B. - 303
Erastova, L. K. - 376
Esipov, V. F. - 8, 254

F

Fesenko, L. M. - 431

G

Garibjanyan, A. T. - 379
Garibyan, G. M. - 106
Gevorkyan, M. S. - 303
Gopal-Krishna - 425
Grachev, S. I. - 20
Grinin, V. P. - 20
Gurzadyan, G. A. - 266, 354, 394
Gyul'budagyan, A. L. - 341

H

Hagen-Thorn, V. A. - 259, 427
Heidmann, J. - 156
Hoag, A. A. - 125
Horsky, I. - 454

I

Iskudaryan, S. G. - 245, 371

K

Kalloglyan, A. T. - 1, 156, 249, 414
Kaplan, S. A. - 77, 212, 282
Karachentseva, V. E. - 242
Khachikyan, E. E. - 136
Khaliullin, Kh. F. - 399
Khromov, G. S. - 181
Kostyuk, I. P. - 242
Krotova, Z. N. - 189
Kulinich, V. V. - 282

L

Lomadze, R. D. - 274

M

Malofeev, V. M. - 408
Malov, I. V. - 408
Malumyan, V. G. - 100, 460
Melik-Alaverdyan, Yu. K. - 12
Mirzoyan, L. V. - 125, 367
Mnatsakanyan, M. A. - 367, 434
Muradyan, R. M. - 161

N

Nagirner, D. I. - 38
Nikogosyan, A. G. - 303
Noskova, R. I. - 169
Nuritdinov, S. N. - 87

O

Oganesyan, Dzh. B. - 394
Oganesyan, R. Kh. - 266
Osherovich, V. A. - 374
Osipkov, L. P. - 223

P

Pavlov, G. G. - 49

R

Rodionov, V. I. - 95
Rogovtsov, N. N. - 293
Ryl'kov, V. P. - 316

S

Saakyan, G. S. - 69, 136, 240, 448
Samson, A. M. - 293
Samus', N. N. - 247
Sanamyan, V. A. - 100, 102, 425, 460
Sedrakyan, D. M. - 69, 448
Selyakov, K. I. - 38
Shul'man, G. A. - 57
Shulov, O. S. - 108
Sobolev, V. V. - 332
Suvorov, E. V. - 203

T

Terebizh, V. Yu. - 104, 422
Tiersch, H. - 146
Tsvetkov, M. K. - 389

V

Vardanyan, R. A. - 12, 234, 369
Vartanyan, Yu. L. - 345

Venugopal, V. R. - 102
Vorontsov-Vel'yaminov, B. A.
238

W

Welin, G. - 176

Y

Yang, C. - 106

ASTROPHYSICS
Volume 11, Numbers 1-4, 1975
(A translation of Astrofizika)

Volume 11, Number 1 January-March, 1975

	Eng.	Russ.
Four-Color Surface Photometry of Markaryan Galaxies. II. Markaryan No. 10 — F. Börngen and A. T. Kalloglyan	1	5
Spectral Observations of Galaxies with High Surface Brightness. I — M. A. Arakelyan, É. A. Dibai, and V. F. Esipov	8	15
Some Properties of Markaryan Galaxies — R. A. Vardanyan and Yu. K. Melik-Alaverdyan	12	21
Analysis of Line Profiles for the Quasar PHL 5200 — S. I. Grachev and V. P. Grinin	20	33
Four-Color Narrow-Band Photoelectric Observations of the Wolf–Rayet Eclipsing Binary Star CV Ser — A. M. Cherepashchuk	30	49
Radiative Transfer in a Line with a Depth-Dependent Absorption Profile — D. I. Nagirner and K. I. Selyakov	38	61
Effect of Atomic Orientation on Absorption Lines in a Strong Magnetic Field — G. G. Pavlov	49	77
Properties of Cold Dense Matter with a Frozen Superstrong Magnetic Field — G. A. Shul'man	57	89
Crystalline Nuclei and the Pomeranchuk Effect in Neutron Stars — Yu. M. Bruk	62	97
The Magnetosphere of Baryon Stars. I. Symmetrical Rotator — R. M. Avakyan, A. K. Avertisyan, G. P. Alodzhants, G. S. Saakyan, D. M. Sedrakyan and É. V. Chubaryan	69	109
Equilibrium Figures of the Interstellar Medium in Galaxies — M. G. Abramyan and S. A. Kaplan	77	121
Nonlinear Stationary Density Waves. I. Strong Waves in a Homogeneous Self-Gravitating System — S. N. Nuritdinov	87	135
The Potential in the Theory of the Third Quadratic Integral of Motion — V. I. Rodionov	95	145
BRIEF COMMUNICATIONS		
Variation in the Flux of the Quasar 3C 380 at 408 MHz — V. G. Malumyan and V. A. Sanamyan	100	153
A Search for the Variability of Radio Source 3C 120 at 327 MHz — V. A. Sanamyan and V. R. Venugopal	102	155
Luminosity Function of Quasistellar Radio Sources — V. Yu. Terebizh	104	157
X Rays Emitted by a Fast Charge on Individual Atoms and Molecules — G. M. Garibyan and C. Yang	106	161
REVIEW		
Magnetic Fields of White Dwarfs — O. S. Shulov	108	163

Volume 11, Number 2 April-June, 1975

Some Remarks on Compact Groups of Compact Galaxies — V. A. Ambartsumyan, H. C. Arp, A. A. Hoag, and L. V. Mirzoyan	125	193
One Form of Activity in Galaxies — K. A. Saakyan and E. E. Khachikyan	136	207
Compact Groups of Compact Galaxies. V — F. W. Baier and H. Tiersch	146	221
Pairs of One Markaryan and One Compact Galaxy — J. Heidmann and A. T. Kalloglyan	156	229
Origin of Galactic Rotation in the Ambartsumyan Cosmogony — R. M. Muradyan	161	237

	Eng.	Russ.
Spectrum of Planetary Nebula IC 4997 in the Near Infrared Region – R. I. Noskova	169	249
Hα-Emission Stars in and near NGC 7000. II – G. Welin	176	261
Continuous Emission of a Gaseous Nebula beyond the Lyman Limit – G. T. Bolgova and G. S. Khromov	181	269
Cascade Process in Strong Magnetic and Electric Fields under Astrophysical Conditions – Ya. I. Al'ber, Z. N. Krotova, and V. Ya. Éidman	189	283
Nonstationary Rayleigh Problem for Magnetized Plasma – L. A. Abramov and L. S. Al'perovich	196	293
Electromagnetic Waves in a Relativistic Plasma with a Strong Magnetic Field – E. V. Suvorov and Yu. V. Chugunov	203	305
Equilibrium and Stability of Two-Sheet Hyperboloidal Figures of Distribution of a Rotating Interstellar Medium – M. G. Abramyan and S. A. Kaplan	212	319
Stellar Motion in the Nonstationary Gravitational Field of a Forming Galaxy – V. A. Antonov, L. P. Osipkov, and A. D. Chernin	223	335
Cooling of White Dwarfs – G. S. Adzhyan	231	347
A Search for Infrared Stars in Open Star Clusters – R. A. Vardanyan	234	351
BRIEF COMMUNICATIONS		
On the Fragmentation of Galaxies – B. A. Vorontsov-Vel'yaminov	238	355
Variability of the Object Markaryan 388 – K. A. Saakyan	240	356
Sculptor-Type Dwarf Galaxies in the Vicinities of Bright Galaxies – F. Börngen, V. E. Karachentseva, and I. P. Kostyuk	242	358
Certain Characteristics of Spirals with Star-Shaped Nuclei – S. G. Iskudaryan	245	362
Model for Horizontal Branch of Globular Clusters – A. M. Éigenson and N. N. Samus'	247	365

Volume 11, Number 3 July-September, 1975

	Eng.	Russ.
Morphological Study of 40 Markaryan Galaxies – F. Börngen and A. T. Kalloglyan	249	369
Spectral Observations of Galaxies with High Surface Brightness. II – M. A. Arakelyan, É. A. Dibai, and V. F. Esipov	254	377
Polarization Observation of Compact Extragalactic Objects – M. K. Babadzhanyants and V. A. Hagen-Thorn	259	385
Ultraviolet Spectrophotometry of a Group of Hot Stars in Vela – G. A. Gurzadyan and R. Kh. Oganesyan	266	397
Equations for the Transfer of Electromagnetic Radiation and the Excitation of Langmuir Turbulence in a Decay Interaction – R. D. Lomadze	274	409
The Balmer Decrement in a Medium Made Transparent by Powerful Radiation – S. A. Kaplan and V. V. Kulinich	282	421
Nonstationary Radiation Transfer in Scattering Media – N. N. Rogovtsov and A. M. Samson	293	439
Incoherent Scattering. V – M. S. Gevorkyan, N. B. Engibaryan, and A. G. Nikogosyan	303	455
Continuous Spectra of WR Stars – V. P. Ryl'kov	316	473
Ellipsoidal Figures of Equilibrium of Interstellar Medium in Side Spheroidal Galaxies – M.G. Abramyan	324	487
Theory of Scattering Photospheres – V. V. Sobolev	332	499
Herbig–Haro Objects and Post-FUOR's – A. L. Gyul'budagyan	341	511
Rapidly Rotating Massive White Dwarfs – G. S. Adzhyan and Yu. L. Vartanyan	345	517
Transition Radiation and Peculiar Nebulas – G. A. Gurzadyan	354	531
BRIEF COMMUNICATIONS		
Dynamical Evolution and Instability of Trapezium-Type Systems – L. V. Mirzoyan and M. A. Mnatsakanyan	367	551
Infrared Observations in the Region of the Cluster NGC 7419 – R. A. Vardanyan and L. G. Akhverdyan	369	553
Nuclei and HII Regions – S. G. Iskudaryan	371	555
A Unique Method of Constructing Force-Free Magnetic Fields – V. A. Osherovich	374	559
Supernova in an Anonymous Galaxy – L. K. Erastova	376	561

Volume 11, Number 4 October-December, 1975

UBV-Photometry of Flare Stars in the Pleiades – O. S. Chavushyan and A. T. Garibjanyan 379 565
New Hα-Emission Stars in the Region of the Nebulae IC 5068-70 and NGC 7000 – M. K. Tsvetkov 389 579
Spectrophotometry of Two Ultraviolet Stars Observed by Orion-2 – G. A. Gurzadyan and Dzh. B. Oganesyan 394 585
The WN 5 + O6 Eclipsing System V444 Zh.Cygni in the λ 4686 He II, λ 6563 He II + Hα, and λ 7112 N IV Emission Lines – Kh. F. Khaliullin and A. M. Cherepashchuk 399 593
Physical Conditions in the Nebula NGC 2359 – L. F. Malov, V. S. Artyukh, and V. M. Malofeev 408 609
Four-Color Surface Photometry of Markaryan Galaxies. III. Galaxies Nos. 11, 12, and 13 – F. Börngen and A. T. Kalloglyan 414 617
Spectra of Galaxies with High Surface Brightness – V. T. Doroshenko and V. Yu. Terebizh 422 631
Occultation by the Moon of Three Markaryan Galaxies at 327 MHz – V. A. Sanamyan and Gopal-Krishna 425 637
A Possible Mechanism for Optical Variability of Seyfert Galaxy Nuclei – V. A. Hagen-Thorn 427 643
Distribution of Galaxies in the Jagellonian Field – L. M. Fesenko 431 651
Quasiasymptotic Solution of the Radiative Transfer Problem in a Layer of Finite Optical Thickness. I. Conservative Scattering – M. A. Mnatsakanyan 434 659
Cosmic Rays from Pulsars – G. S. Saakyan, D. M. Sedrakyan, É. V. Chubaryan, R. M. Avakyan, and G. P. Alodzhants 448 679
Gravitation Field of a Flat Uniform Disk – R. M. Avakyan and L. Horsky 454 689

BRIEF COMMUNICATIONS
Scanning Emission Variability for the Quasars 3C 273 and 3C 279 at 408 MHz – V. G. Malumyan and V. A. Sanamyan 460 699

SURVEY
Model Atmospheres for Normal Stars (A Survey of Reports of 1965-1973) 462 703

INDEX
Author Index, Volume 11, Numbers 1-4, 1975 487
Tables of Contents, Volume 11, Numbers 1-4, 1975 489